Approved For Release 2001/07/28 : **\$ 16.001** 78-04723A000100160010-8

Attachment to SG/69-281

MEMORANDUM FOR: Chief, Systems Group

SUBJECT : Suggested Content for a Systems Analysis Course

REFERENCE: Memorandum, 25 July 1969, 25X1A

Critique - Systems Analysis

25X1A Course Sponsored by OCS

l. Per your request on reference memorandum, we feel that a basic course in Systems Analysis should include as a minimum the following topics. The assumption is that the student has little or no background in Systems Analysis or Data Processing.

- A. System Survey How to go about the study of the current system.
- B. Data Gathering and Analysis Interviewing, searching records, and sampling techniques.
- C. Determining System Requirements Inputs, outputs, etc.
- D. Designing a New System Developing alternatives, costs, and benefits.
- E. Selecting a Design Programming aspects, including flowcharts and decision tables, and scheduling.
- F. Developing Specifications.
- G. System implementation Selection of equipment, programming language to be used; testing; debugging; user training.
- H. Evaluation and Documentation.
- 2. These processes should be developed in appropriate sequence by the seminar or workshop approach using a moderately simple, but real problem. The problem used should be Agency-oriented, but not one which is peculiar to only one directorate; i.e., OCS or the DDP.
- 3. Prior to analyzing the sample problem, the following specialized techniques should be presented in seminar, lecture, or

workshop sessions as appropriate. The students should be encouraged to use their judgment as to which of these techniques should be applied.

- A. Specification Writing
- B. Procedure Writing
- C. Forms Design
- D. Flow Charting
- E. Decision Tables
- F. File Design (structure, format)
- G. Equipment Demonstrations (storage, display, input, etc.)
- H. Statistics analytical techniques.
- Programming Languages not at the coding level, but comparing the advantages of one language versus the other, for example.
- J. Simulation not in great depth, but an overview of the various techniques.
- K. Linear Programming basic concepts.
- L. Micro Image Techniques
- M. Basic Teleprocessing Systems Design Requirements
- N. Time-sharing and other Multi-processing concepts.
- 4. The presentation of the techniques listed above should be in general terms sufficient to familiarize the student with their basic concepts and existence. Presumably, after completing this introductory course in Systems Analysis, the student will reinforce his knowledge of each of these techniques by attending more comprehensive courses as required.
- 5. The lectures should be presented by instructors who are selected on the basis of their ability to communicate rather than relying solely upon their knowledge of the subject matter to be

-3-

discussed. The interrelationship of ADP components in the Agency should receive more attention.

25X1A